INDIVIDUAL INCOME TAXATION 1947-79

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ABSTRACT

Between 1947 and 1979 the average rate of Federal individual income tax has varied within a fairly narrow band. Nonetheless, that rate is currently approaching a new high and, combined with the average rate of State individual income taxation, did reach a new high in 1979. Much more significant have been the changes in the base and the effective rate structure of the tax. While the tax base has always been one-half or less of personal income, its size and composition since 1947 have been altered by two opposing sets of influences. First, increases in exclusions, itemizations, standard deductions and credits have reduced the tax base by an additional 18 percent of personal income. Second, the base has been increased by 24 percent of personal income, principally because of a substantial decline in the relative amount of personal exemptions and adjusted gross income of nontaxable persons. With regard to the rate structure, in the early 1960's only 10 percent of tax returns faced a positive tax rate other than in the 20-22 percent range; by 1979, marginal tax rates had become substantially higher for tax returns above the median marginal rate and lower for taxable returns below the median.

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I. INTRODUCTION

Since the end of World War II there have been numerous revisions in the laws governing the individual income tax. During the last decade alone, there were at least five major "revenue," "tax reform," or "simplification" acts. Not only has each revision affected the base of the individual income tax through various changes in allowable exclusions exemptions, deductions and credits, but the rate schedules applying to the tax base have been occasionally altered as well. These tax laws have been further modified and interpreted through an expanding set of regulations, rulings, and court decisions.

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Legislative, executive, and judicial actions have not been the only causes of changes in the rates and base of individual income taxation. Since 1947, individuals have altered the distribution of their earnings between nontaxable and taxable sources, and they have reallocated their expenditures among various excludable (or deductible) and nonexcludable items. These modifications of earning and expenditure patterns may be the result of several factors, including growth in *per capita* income, redistribution of income shares, as well as incentives and disincentives written into the Internal Revenue Code.

Since the schedules of tax rates in the individual income tax laws are progressive, a rise in money incomes because of inflation or real growth in the economy tends to push individuals into higher marginal tax rate brackets and to increase average tax rates as well. However, whether actual rates rise over a given period is also dependent on legislated tax changes enacted over the same interval.

Thus, changes in the economy interact with the actions of individuals and Congress to produce an individual income tax structure that is itself constantly changing. The purpose of this paper is to examine the net effect of these various changes by presenting historical data on aggregate measures of the burden of the individual income tax, including the size of the tax base relative to personal income and the distribution of marginal tax rates faced by individuals. Where trends are apparent, they are also noted and discussed in the text.

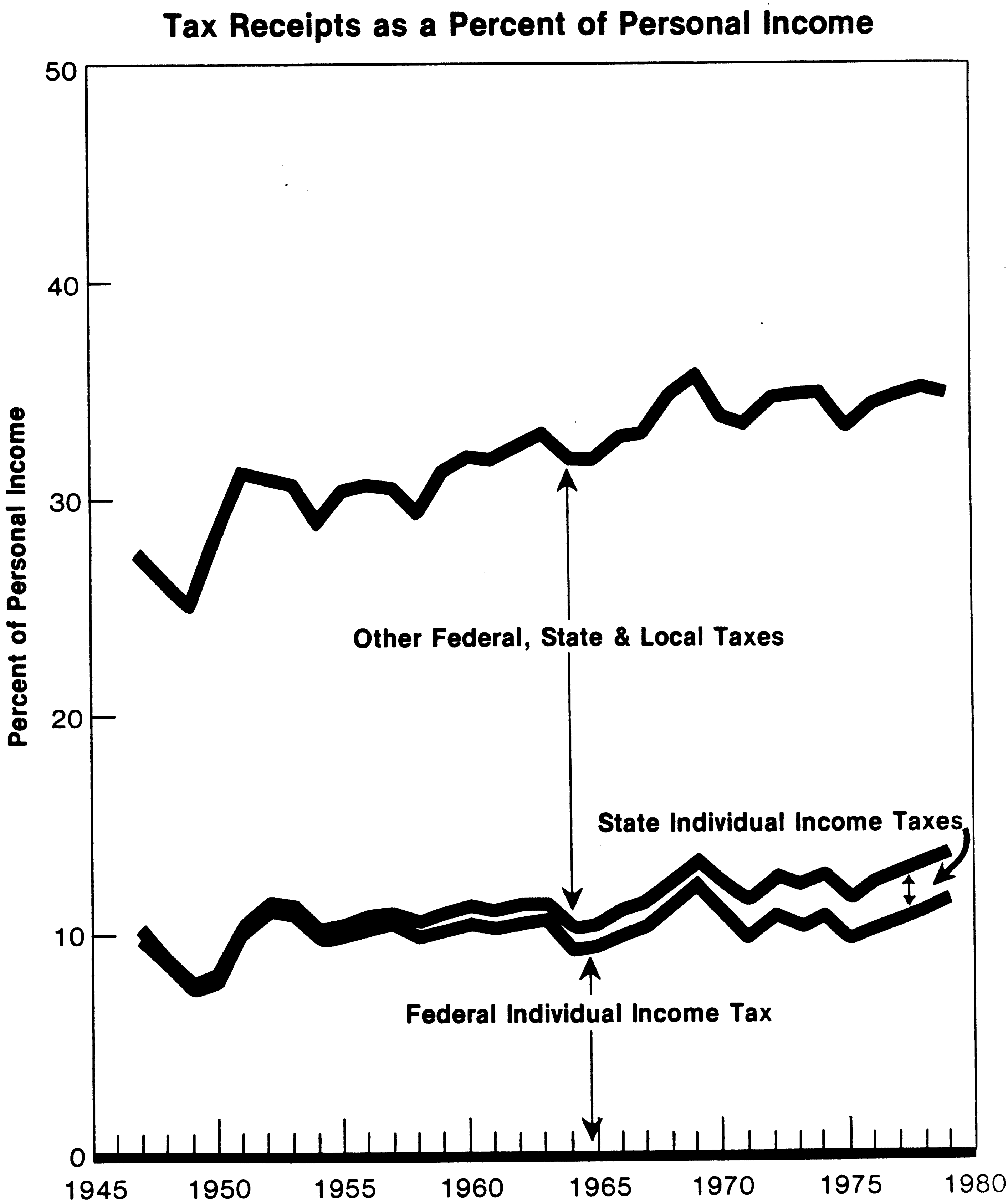
II. THE INDIVIDUAL INCOME TAX IN THE FEDERAL SYSTEM OF TAXATION

The Federal individual income tax is the largest single source of tax revenues in the Federal tax system. Since 1947, "effective" tax rates, i.e., Federal individual income tax receipts as a percent of personal income, 1/ have varied between 7.4 percent and 12.1 percent (see Figure 1). 2/ If the early postwar years are ignored, the band has been even more narrow; excluding years before 1951, the effective rate has varied between a low of 9.2 percent (in 1964) and a high

1/ Effective tax rates can be measured in several ways. Tax burdens can be based upon receipts or liabilities, while income can be approximated by any one of several measures such as personal income or national income, as defined by the Bureau of Economic Analysis. Figure 1 presents tax burdens on a receipts basis because "liabilities" are not measured for some of the taxes under consideration here. Since later parts of this study use personal income as the measure of the income of individuals, consistency dictated its use in Figure 1 also. Some taxes, such as corporate profits tax, are usually measured as a percent of national income (BEA counts corporate dividends, but not profits, as part of personal income). Nonetheless, the trends presented in Figure 1 would vary little if alternative measures of tax burdens or income were chosen.

2/ Further detail is provided in Table A-1 in the Appendix.

Figure 1


Tax Receipts as a Percent of Personal Income
Percent of Personal Income
50
40
30
20
10
0
1945
1950
1955
1960
1965
1970
1975
1980
Other Federal, State & Local Taxes
State Individual Income Taxes
Federal Individual Income Tax

of 12.1 percent (in 1969). While the range has been limited over these years, the peaks have occurred during the Korean and Vietnam conflicts. However, projections generally show that by 1981 this ratio could rise above the previous high if there are no tax reductions enacted for that year.

Federal individual income tax receipts have generally comprised about one-third of total Federal, State and local tax receipts. Compared to individual income tax receipts, however, total receipts increased more rapidly and steadily from 1947 to 1979, although, like individual income tax receipts, total receipts as a percentage of personal income reached a high in 1969. From 1969-1979, the range of total receipts relative to personal income has been quite narrow, varying between a low of 33.1 percent and a high of 36.0 percent.

The composition of total receipts has changed more dramatically than the amount of these receipts. While the Federal individual income tax remained a fairly constant percentage of personal income, social security taxes and State and local taxes increased substantially from 1947 to 1979, more than offsetting declines in Federal corporate profits tax and other Federal taxes, chiefly excises. Increases in income taxes collected by State and local governments were one reason for the rise in total State and local taxes. These income taxes have comprised an increasingly larger share of personal income and total State and local taxes over the 1947-1979 period. When State and local income taxes are combined with Federal income taxes, a growth trend in individual income tax collections as a percentage of personal income becomes more apparent. Indeed, by 1979, this aggregate measure of income taxes paid by individuals had surpassed the previous high reached in 1969.

III. THE TAX BASE

Average tax rates give a misleading picture of the effect of governmental activity on the use of resources in the economy. Factor incomes "taken" and reallocated by the government are often measured differently depending upon whether a transfer or subsidy is accomplished through direct expenditures or tax reductions. Even if average rates stay constant, changes in exclusions, deductions, credits and marginal rates may cause a reallocation of resources by influencing individuals to engage in tax-preferred activity and by affecting their marginal decisions to work, save and invest. Therefore, it will be useful to look beyond changes in average tax rates to the more specific changes in the income tax base and in the rates of tax that apply to each part of that base.

A. Exclusions

Over the last three decades there has been a large growth in the amount of income that is legally excluded from taxation, that is, income not required to be counted as adjusted gross income (AGI) on individual income tax returns. Table 1 presents the major items of personal income for which an exclusion is allowed either by law or by regulation.

The net exclusions reported in this table are derived in various ways depending on the nature of the exclusions and how the Bureau of Economic Analysis (BEA) estimates personal income. For transfer programs such as social security, the BEA measures personal income on the basis of benefits received, but, in order to avoid double-counting of transfer income, does not include in personal income either employee or employer contributions. The income tax system, on the other hand, counts only employee contributions as subject to income tax, but excludes all benefits and all employer contributions from taxation. Therefore, to derive the net amount of social security income included in personal income, but excluded from income taxation, the taxable payments made by employees must be netted from the nontaxable benefits. In a year in which receipts equal outlays, this net exclusion is approximately equal to the value of employer contributions which are nontaxable to employees.

Table 1

PERSONAL INCOME EXCLUDED FROM ADJUSTED GROSS INCOME a/
(As a Percentage of Personal Income)

Year	Transfers: Net Nontaxable Soc.Sec., Railroad Retirement and Supplemental Med. Insurance: Retirement & Disability	Transfers: Net Nontaxable Soc.Sec., Railroad Retirement and Supplemental Med. Insurance: Health	Transfers: Other Nontaxable Transfers	Net Nontaxable Labor-Related Income: Pension & Profit Sharing	Net Nontaxable Labor-Related Income: Health Insurance	Net Nontaxable Labor-Related Income: Other Labor Compen-sation	Other Statutory Exclusions	Other Differences (Net)	Total
1947	-.2	-	5.7	.5 b/	.2 b/	.5 b/	1.7	0.7	9.1
1949	-.1	-	5.4	.5	.3	.5	1.3	2.9	10.9
1953	.3	-	3.5	.9	.5	.5	1.3	4.2	10.8
1957	1.0	-	3.6	1.1	.7	.6	1.3	4.0	12.2
1961	1.6	-	4.2	1.1	.9	.7	1.3	4.0	13.7
1965	1.8	-	3.4	1.3	1.1	.7	1.5	3.9	13.6
1969	1.3	.5	3.5	1.3	1.3	.8	1.8	3.0	13.5
1973	2.3	.3	4.3	1.5	1.7	.9	1.6	2.8	15.4
1977	2.9	.8	5.0	1.9	2.2	1.0	1.8	3.1	18.6
1978	2.8	.8	4.6	1.9	2.2	1.1	1.8	3.3	18.4
1979	2.6	.8	4.4	2.1	2.1	1.1	1.8 c/	3.6	18.6

a/ Sources and details in Appendix, Table A-2.

b/ 1947 information not available; percentage assumed to equal that for 1948.

c/ Limited 1979 information available; percentage assumed to equal that for 1978.

On the other hand, both the BEA and Table 1 treat non-taxed employer contributions to private pension and profit-sharing plans, plus interest on pension reserves, as current income; to derive a figure for net non-taxable income in this case, taxable benefits paid to plan recipients must be subtracted.3/

Public transfer payments have grown significantly since 1947, primarily because of increases in payments for retirement and disability through social security and for health care through social security and supplementary medical insurance. The category, "other nontaxable transfers," which includes unemployment compensation, 4/ veterans' benefits, food stamps, etc., has remained more stable in relation to personal income, although there have been changes in the composition of those transfers, e.g., increases in food stamp payments relative to veterans' payments.

Just as payments to public retirement and health plans are the major sources of nontaxable transfer income, payments to private retirement and health plans are the major sources of nontaxable labor-related income. From 1947 to 1979 the

3/ For further details, see Appendix Table A-2.

4/ Beginning in 1979 a small portion of total unemployment compensation will be subject to income tax. The exclusion will phase out for a single return with an adjusted gross income, plus unemployment compensation, in excess of $20,000 ($25,000 for joint returns).

net exclusion resulting from the tax treatment of pension, profit-sharing and health plans (primarily the employee exclusion of employer payments to these plans) has risen steadily from .7 percent to 4.2 percent of personal income. By the end of the 1960's the exclusion of health insurance benefits had become as important as the exclusion applying to pension and profit-sharing plans.

The increased tendency of employees to receive labor compensation in the form of fringe benefits is reflected not only in the growth of retirement and health plans. Non-taxable "other labor compensation" (e.g., group life insurance) also demonstrates fairly continuous growth relative to personal income.

"Other statutory exclusions" include tax-exempt interest income and most items listed on individual tax forms as adjustments from gross income to adjusted gross income, e.g., moving expenses. On the whole, these other exclusions show mixed trends since 1947, although there appears to be a slight growth relative to personal income since the late 1950's. Even though new types of exclusions have been adopted over time, the amount excluded through existing provisions often grew slower than personal income because maximum exclusion amounts (e.g., for dividends or contributions to individual retirement accounts) remained fixed during extended periods of income growth. 5/

5/ For 1981 and 1982 there will be a new exclusion of $200 per taxpayer for interest and dividend income. See the Crude Oil Windfall Profit Tax Act of 1980.

Finally, there appears to have been a fair amount of cyclical movement in the net amount of exclusion resulting from "other differences." This variable includes those exclusions not discussed thus far, plus several different items which are necessary to reconcile personal income and adjusted gross income. For instance, "other differences" not only includes the exclusion arising from the nontaxation of imputed rental income, but also subtracts income treated as adjusted gross income, but not as personal income (e.g., realized capital gains). Therefore, this measure should be interpreted with caution.

Although different historical trends apply to different exclusions, total exclusions have grown over the last 30 years from about 11 percent to 19 percent of personal income. These exclusions apply to a broad group of individuals; indeed, as workers receiving pension and health benefits or as participants in the social security system, there are few, if any, taxpayers who do not "benefit" from exclusions.

For many taxpayers, however, such benefits may be largely illusory. To the extent that the government raises the same level of revenues, the elimination of tax on some income means a higher rate of tax on other income. 6/ For instance, in 1979 exclusions were about 18.4 percent of

6/ Of course, the distribution of tax burdens could differ even if the amount of tax collections were the same.

personal income. While the average Federal tax rate on personal income was about 11.6 percent, on adjusted gross income the rate was 14.2 percent, or 22.5 percent higher. By the same token, marginal tax rates were higher than they would have been if excludable income had been taxable. These higher marginal tax rates may act not only as a disincentive to the taxpayer to work and save, but, when he works and saves, as a further incentive to obtain income in excludable form. The effect may build upon itself. As an example, excluding employer payments for medical insurance leads to a higher tax rate on other types of income (revenues being held constant), which in turn provides future incentives for individuals to take more of their income in the form of employer-provided medical insurance. This increase in the demand for such insurance (along with a possible increase in the price of medical care) increases the amount of excludable employer payments for medical insurance, and the process continues. 7/

B. Deductions, Exemptions, Credits and Other Nontaxable Adjusted Gross Income

To determine the percentage of personal income which actually comprises the tax base, it is necessary not only to take into account the amount of exclusions from adjusted

7/ See Steuerle and Hoffman (1979).

gross income, but also the deductions, exemptions, and similar exceptions by which the taxpayer reduces taxable income and tax liabilities.

Unlike exclusions, the total value of these other exceptions have declined relative to personal income over time (see Table 2). One reason for this decline is that, relative to personal income, the adjusted gross income of nontaxable individuals (unfortunately, this amount cannot be measured separately from other differences between BEA and IRS measures of AGI) decreased substantially from 1947 to the end of the 1960's and then remained relatively constant during the 1970's. 8/ Because wages and incomes of households have grown faster than tax-exempt levels of income (discussed below), the decrease in the relative amount of AGI of nontaxable individuals is explained in part by the

8/ Ideally, one would like to separate the AGI of nontaxable individuals from other differences between BEA and IRS measures of AGI. However, while it is possible to identify the adjusted gross income of nontaxable filers, the adjusted gross income of nontaxable nonfilers is unknown and is treated by BEA as part of a final "unexplained difference" or "reconciliation" between the BEA and IRS measures of AGI. This reconciliation includes income of taxable filers and nonfilers which should have been reported, but was not (nonreported income). When the AGI of nontaxable filers is combined with this reconciliation, as in the second column of Table 2, the AGI of nontaxable filers alone comprises at least 30 percent of the total. Like the total, the AGI of nontaxable filers declines relative to personal income; it is reasonable to assume that the AGI of all nontaxable individuals shows a similar trend.

Table 2

DEDUCTIONS, EXEMPTIONS, CREDITS AND OTHER NONTAXABLE ADJUSTED GROSS INCOME a/
(As a Percentage of Personal Income)

Year	AGI of Nontaxable Individuals, Non-reported AGI and Reconciliation	Standard Deductions or Zero Bracket Amounts for Non-Itemizers on Taxable Returns	Itemized Deductions on Taxable Returns	Exemptions on Taxable Returns	Income Offset by Credits on Taxable Returns	Total
1947	19.7	4.5	3.7	23.3	.3 b/	51.5
1949	22.0	4.4	3.7	24.3	.3 b/	54.7
1953	16.1	4.5	5.0	24.0	.3 b/	49.8
1957	13.1	3.5	6.8	21.9	.5	45.8
1961	11.8	2.8	8.5	19.8	.5	43.4
1965	10.7	2.9	8.8	17.0	.5	39.9
1969	8.5	2.4	10.1	14.1	.5	35.5
1973	9.5	5.1	9.6	12.4	.7	37.3
1977	9.9	7.3	8.6	8.2	4.7	38.6
1978	9.4	6.7	9.1	7.7	5.2	38.0
1979	9.4 c/	6.5	9.0	9.3	1.5	35.7

a/ Sources and details in Appendix, Table A-3.

b/ Information not available before 1954; percentage assumed to equal that for 1954.

c/ Limited 1979 information available; percentage assumed to equal that for 1978.

simultaneous decrease in the percentage of households with AGI below tax thresholds.

The amount of exemptions and deductions relative to personal income has also decreased since 1947. This shrinkage is due almost entirely to the drastic reduction in the relative value of personal exemptions. On taxable returns, these exemptions have decreased since the early 1950's from over 24 percent to 9.3 percent of personal income. 9/

Standard deductions (or zero bracket amounts for nonitemizers) also fell in relative value during the 1950's and 1960's, but then rose in the 1970's from less than 2 1/2 percent to a high of 7.3 percent in 1977. By 1979, this percentage had dropped to 6.5 because prices and incomes rose faster than the zero bracket amount, which was increased slightly in 1979.

9/ In 1979, the personal exemption was increased from $750 to $1,000, but the value of this increased exemption was largely offset by the elimination of a "general" tax credit available to all taxpayers for the years, 1975-1978.

Since 1947 there has also been an increase in the amount of expenditures that have been itemized on tax returns. Itemizations grew from 3.7 percent of personal income in 1947 to 10.1 percent in 1969, 10/ then declined slightly to 9.0 percent by 1979. Accompanying this decline throughout the early and middle 1970's, however, were the legislated increases in the value of the standard deduction, and a corresponding increase in the number of non-itemizers. Indeed, the decline in itemizations from 1969 to 1979 equaled only 1.1 percent of personal income, while the increase in standard deductions was 4.1 percent.

A final way to reduce individual income tax liability is through the use of credits. By "grossing up" the tax offset by the credit, it is possible to estimate an equivalent amount of income which is made nontaxable. 11/ While credits offset only 1.4 percent of personal income in 1979, that percentage was still substantially higher than any percentage that applied before the 1970s. From 1975 to 1978 a general tax credit was provided to taxpayers in a manner somewhat similar to the personal exemption, that is, it was available to all taxpayers rather than limited to groups of taxpayers

10/ A high of 10.4 percent was reached in 1970.

11/ See footnote c/ to Table A-5 in the Appendix for further details.

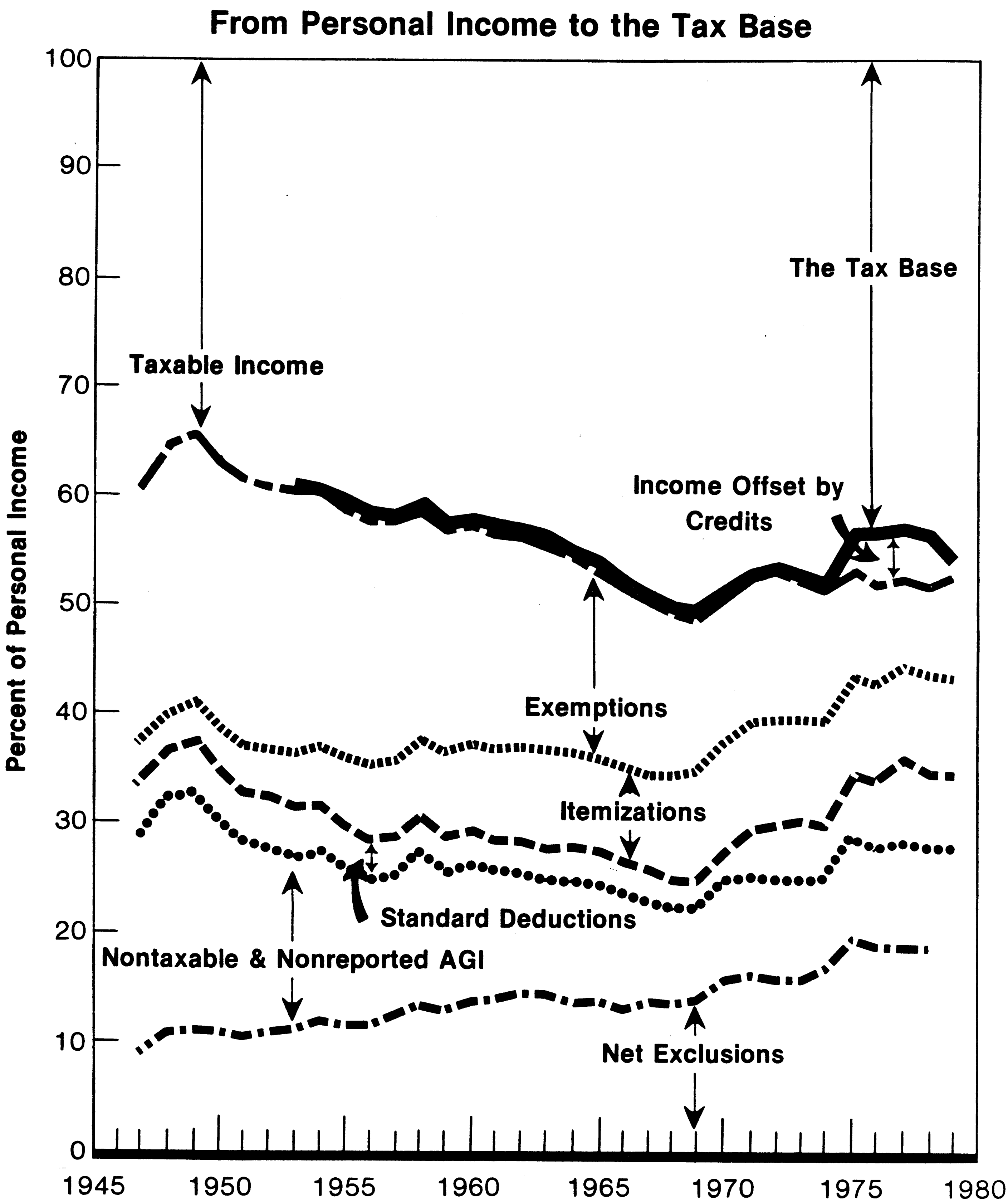
with specific characteristics or particular expenditures (e.g., credit for the elderly, child and dependent care credit). Income offset by all credits was at its highest level during that period.

C. <u>Aggregate Reduction in the Tax Base</u>

When the exclusion amounts listed in Table 1 are combined with the amount of deductions, exemptions, etc. detailed in Table 2, they result in 49 percent to 66 percent of personal income being excepted from taxation for each year of the period, 1947 to 1979 (see Figure 2). Thus, no more than 51 percent of personal income was ever in the tax base and taxed at a positive rate. This income taxed at a positive rate (or, excluding income offset by credits, taxable income) actually grew as a percentage of personal income through the 1950's and 1960's, reaching a high in 1969. From 1970 to 1977, there was a decline in the tax base as a percentage of personal income to about the level applicable in the early 1960's, although the trend has been upward again since 1977.

More dramatic than the overall trend has been the combination of factors which produced this movement. For instance, from 1947 to 1979, the tax base increased (or income excepted from taxation decreased) by 6.3 percent of personal income because a decrease of 24.3 percent of

Figure 2


From Personal Income to the Tax Base
100
90
80
70
60
50
40
30
20
10
0
Percent of Personal Income
Taxable Income
The Tax Base
Income Offset by Credits
Exemptions
Itemizations
Standard Deductions
Nontaxable & Nonreported AGI
Net Exclusions
1945
1950
1955
1960
1965
1970
1975
1980

personal income principally in the value of personal exemptions and the AGI of nontaxable individual more than offset an increase of 18.0 percent of personal income in the amount of exclusions, standard deductions, itemizations and credits (see Table 3).

D. Tax-Exempt Levels of Income

Exclusions, deductions, exemptions and credits not only reduce the income tax base of taxpayers with positive tax liability, but they also determine the tax-exempt levels of income or the minimum levels of income for which taxpayers bear any tax liability at all. Since exclusions and most credits are available to only some taxpayers (the general tax credit of 1975-78 being an exception), minimum tax-exempt levels for most people are determined by the standard deduction (or zero bracket amount), the personal exemption and the general tax credit. 12/

Figure 3 presents data on tax-exempt levels of income for the years, 1947-79, and compares these tax-exempt levels to income and poverty levels for the same years. 13/ Three

12/ Tax-exempt levels for certain groups of taxpayers may be much higher. For instance, taking into account the tax credit for the elderly, in 1979 the tax exempt level for an elderly couple without social security income ($10,802) was about twice that of a non-elderly couple ($5,400). If the elderly couple had social security income, their tax-exempt level would be even higher.

13/ See Table A-4 in the Appendix for further details.

Table 3

AGGREGATE CHANGE IN THE TAX BASE, 1947-79

(As a Percentage of Personal Income)

Increases in Tax Base Due to Decreases In:	
Personal Exemptions	14.0%
AGI of Nontaxable Individuals, Nonreported AGI & Reconciliation	10.3
Total Increase	24.3
Decreases in Tax Base Due to Increases In:	
Net Exclusions	9.5%
Itemizations	5.3
Standard Deductions	2.1
Income Offset by Credits	1.2
Total Decrease	18.0
Net Increase in Tax Base (or Decrease in Income Excepted from Taxation)	6.3%

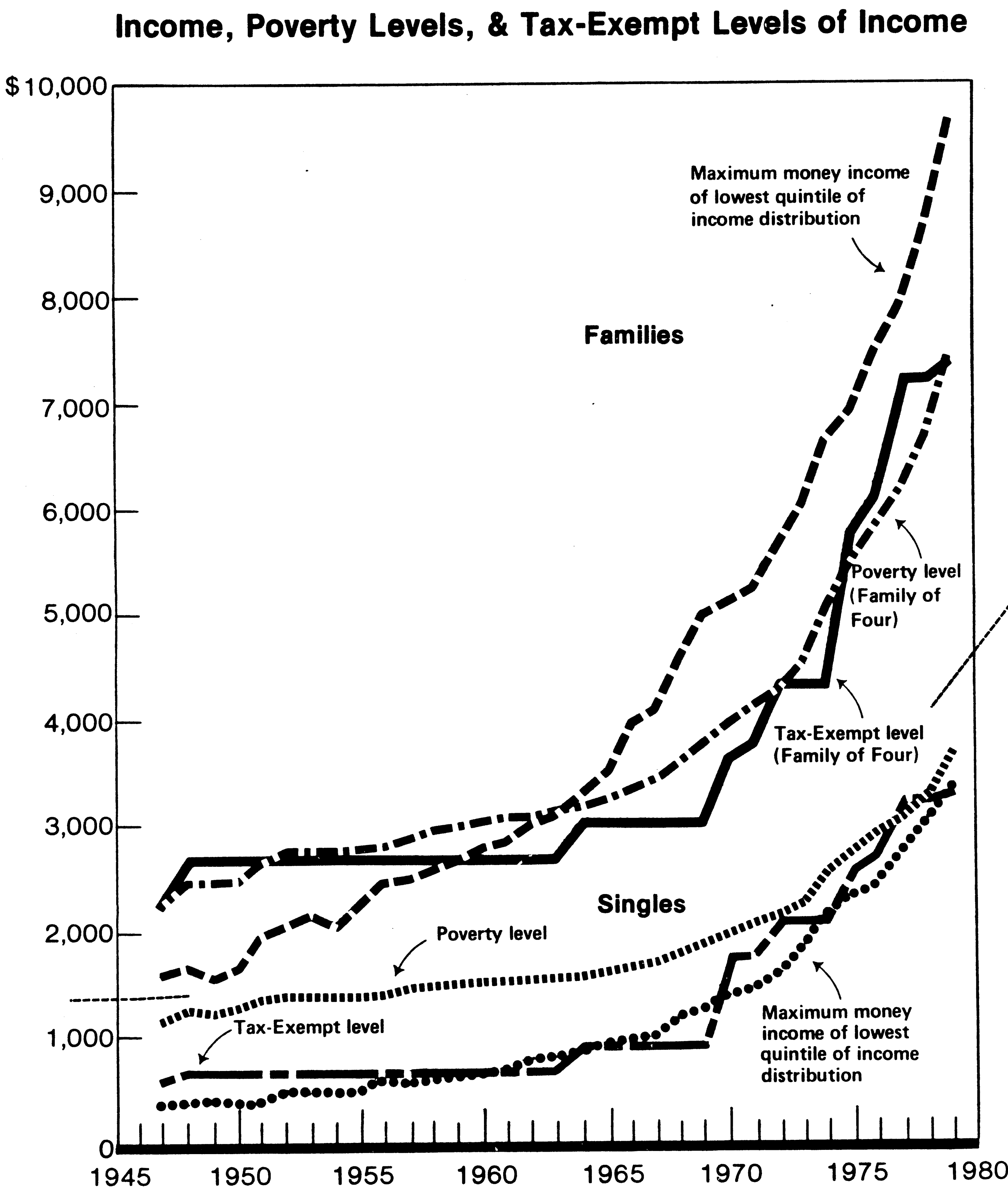
general trends can be detected. First, tax-exempt levels for families of four have remained fairly close to official poverty levels for the entire period. This is not coincidental, at least not since 1964. "Congress has used the standard deduction or (the minimum standard deduction) and the personal exemption to establish a tax-free income level approximating the poverty level. This policy began with the Revenue Act of 1964." 14/

Second, tax-exempt levels have increased at the same rate or at a slightly higher rate than the increase in prices since 1947, but at a rate lower than the rate of increase in income or minimum wage. In part, this is a result of the connection made between official poverty levels and tax-exempt levels of income. Official poverty levels are redetermined each year merely by multiplying the previous year's poverty level by the percentage change in the consumer price index (CPI) between the two years. 15/ Since incomes

14/ General Explanation of the Revenue Act of 1978, pp. 38-39.

15/ The history of the poverty "line" can be found in Orshansky (1975). Related to its development was the "War on Poverty," officially announced in the Economic Report of the President, January, 1964. Quasi-official poverty levels were designated as an "official" statistical series by the Budget Bureau in 1969.

Figure 3


Income, Poverty Levels, & Tax-Exempt Levels of Income
$10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
1945
1950
1955
1960
1965
1970
1975
1980
Maximum money income of lowest quintile of income distribution
Families
Poverty level (Family of Four)
Tax-Exempt level (Family of Four)
Singles
Poverty level
Tax-Exempt level
Maximum money income of lowest quintile of income distribution

and wages have usually increased faster than prices, tax-exempt levels of income have excluded smaller and smaller proportions of the population over time. For instance, the maximum money income of a family in the lowest quintile of the income distribution (i.e., the income level exceeded by exactly 80 percent of families) grew 512 percent from 1947 to 1979, while tax-exempt levels for families of four increased by only 233 percent over the same period. 16/ These data help to explain one of the trends noted previously: the decline in the adjusted gross income of nontaxable individuals as a percentage of personal income.

Finally, there has been a substantial shift in the distribution of benefits arising from the standard deduction and the personal exemption away from families with dependents and toward single persons and couples without dependents. Since 1947, tax-exempt levels have risen 494 percent for single persons, 386 percent for couples without dependents, but only 233 percent for couples with two dependents. The percentages are even lower for couples with more than two dependents.

16/ Similarly, per capita personal income and minimum wages have increased faster than tax-exempt income levels. See Table A-4 in the Appendix.

This redistribution of benefits arose for two related reasons. First, in 1964, the minimum standard deduction for a single person was raised above one-half the level for a married couple. Thus, single persons began to receive increases in the standard deduction at a faster rate than that applied to married couples. This structural change emanated in part from the notion, adopted in 1964, that tax-exempt levels should approximate the poverty level. Since the poverty level for a single person was at a level higher than one-half the level for a couple, the tax-exempt level for a single person needed to be raised to a level more than one-half that of a couple. 17/

A second cause of the redistribution of benefits toward singles and married couples without dependents has been the reduction in the importance of the personal exemption relative to the standard deduction. Increases in the amounts of standard deduction are the same for couples with and without dependents, while increases in exemption levels are worth more to couples with dependents. Thus, in recent decades tax-exempt levels of income for families without dependents have moved closer and closer to tax-exempt levels for families with dependents.

17/ In the Tax Reform Act of 1969, the Congress also lowered the tax rates of single individuals without lowering the tax rates of married couples. One result of the restructuring of both standard deductions and tax rate schedules has been a "marriage penalty." See Stromquist (1979).

IV. TAX RATES

To complete the picture of the burden of the individual income tax over time, it is necessary to examine the changes in the marginal tax rates faced by individuals. To the extent that taxes produce distortions in the work, saving or investment behavior of individuals, it is marginal, not average, rates of tax that are generally considered responsible. 18/

The distribution of returns and personal income by marginal rate of tax is presented in Figures 4 and 5. 19/ Marginal tax rate information is not available before 1961. For 1979, the Treasury Tax Model was used to make the necessary calculations. 20/

18/ See, for instance, Harberger (1966) or Taubman (1978).

19/ Again, see Appendix for the details of the calculations. Note that marginal tax rates must be measured on a "liabilities" basis. In Figure 1, however, tax rates were measured on a receipts basis. Comparisons between these two figures will still be fairly accurate.

20/ Information on the years 1963 and 1974 are also shown in Table A-5 in the Appendix. In 1963, 1969 and 1974, effective tax rates (Federal income taxes as a percent of personal income) peaked before heading back down again. Measuring "peak to peak" enhances the possibility that detected trends upward or downward do not merely reflect cyclical changes in rates of tax.

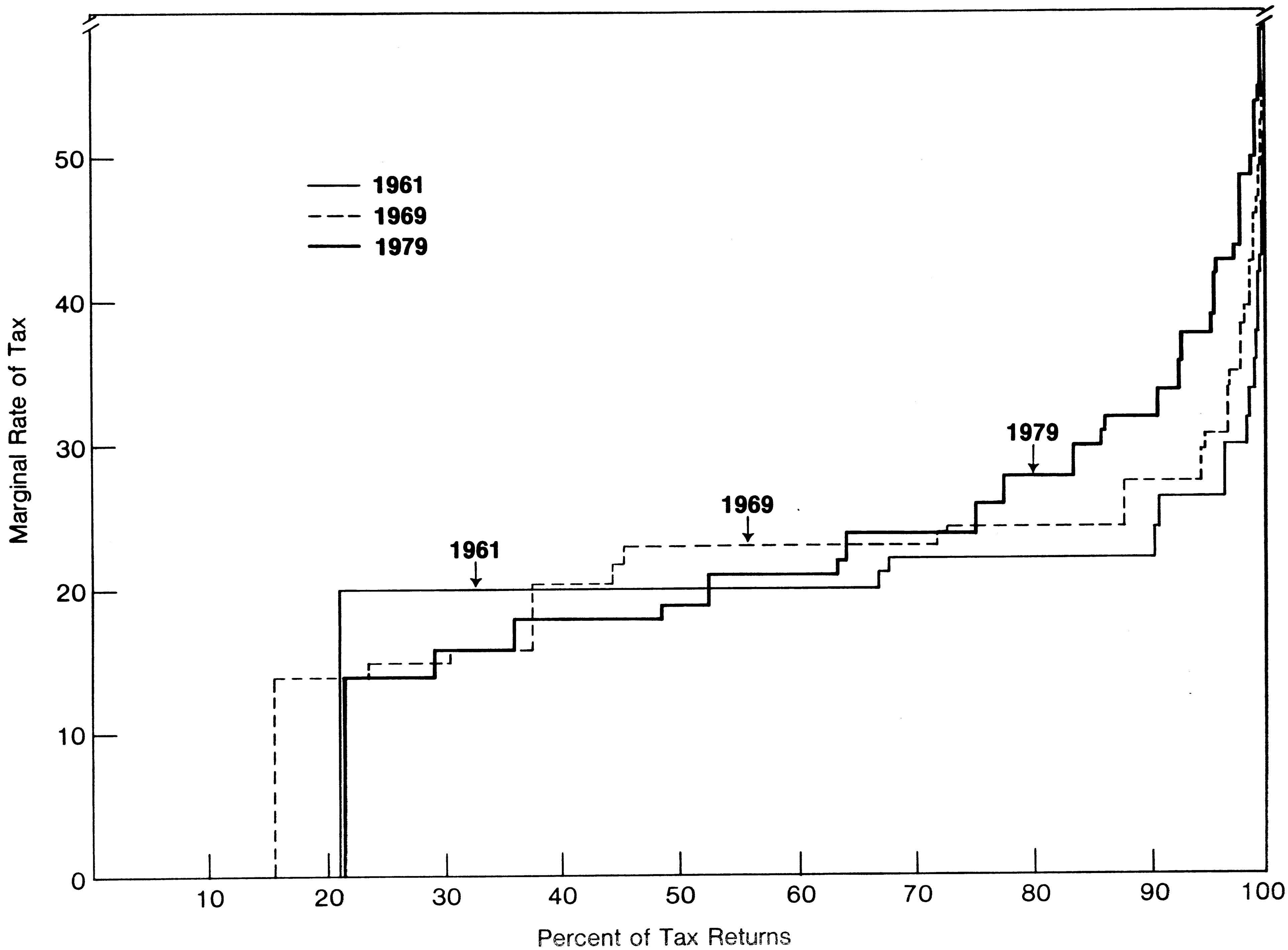
The structure of tax rates has changed significantly since 1961. In the early 1960's most individuals faced an essentially constant, rather than progressive, schedule of tax rates. For instance, in 1961 only 10 percent of tax returns had a positive marginal tax rate other than 20-22 percent (see Figure 4). By 1969 the tax structure had become much more progressive. 21/ Tax rates in the first bracket were lowered from 20 to 14 percent in the Revenue Act of 1964, while at the top end of the scale, growth in incomes began to push individuals into higher marginal rate brackets. By 1979, the effective structure of rates had become more progressive still, with roughly half of all returns at higher marginal tax rates than in 1961 and three-tenths at lower rates (two-tenths remained nontaxable). 22/ Some of the greatest differences occurred for tax returns with the highest marginal rates of tax. For instance, for returns at the 95th percentile, the marginal tax rate increased from 26 percent in 1961 to 32 percent in 1969 to 38 percent in 1979.

21/ Some of the 1969 increase was due to the 10 percent surcharge in effect for that year. See Appendix for details of marginal rate calculations for that year.

22/ The story does not change much if only joint returns are examined. Despite the fact that marginal tax rates for single returns are higher than those for joint returns at a given income level, the distribution of single returns by marginal tax rate resembles closely the distribution of joint returns by marginal tax rate, after account is made for the larger relative number of nontaxable single returns. The median joint return has a marginal tax rate equivalent to the rate applying at about the 60th percentile for all returns. At the 95th percentile, marginal tax rates have been close to identical.

Figure 4

Cumulative Percent of Returns Taxed at or Below Each Marginal Rate of Tax

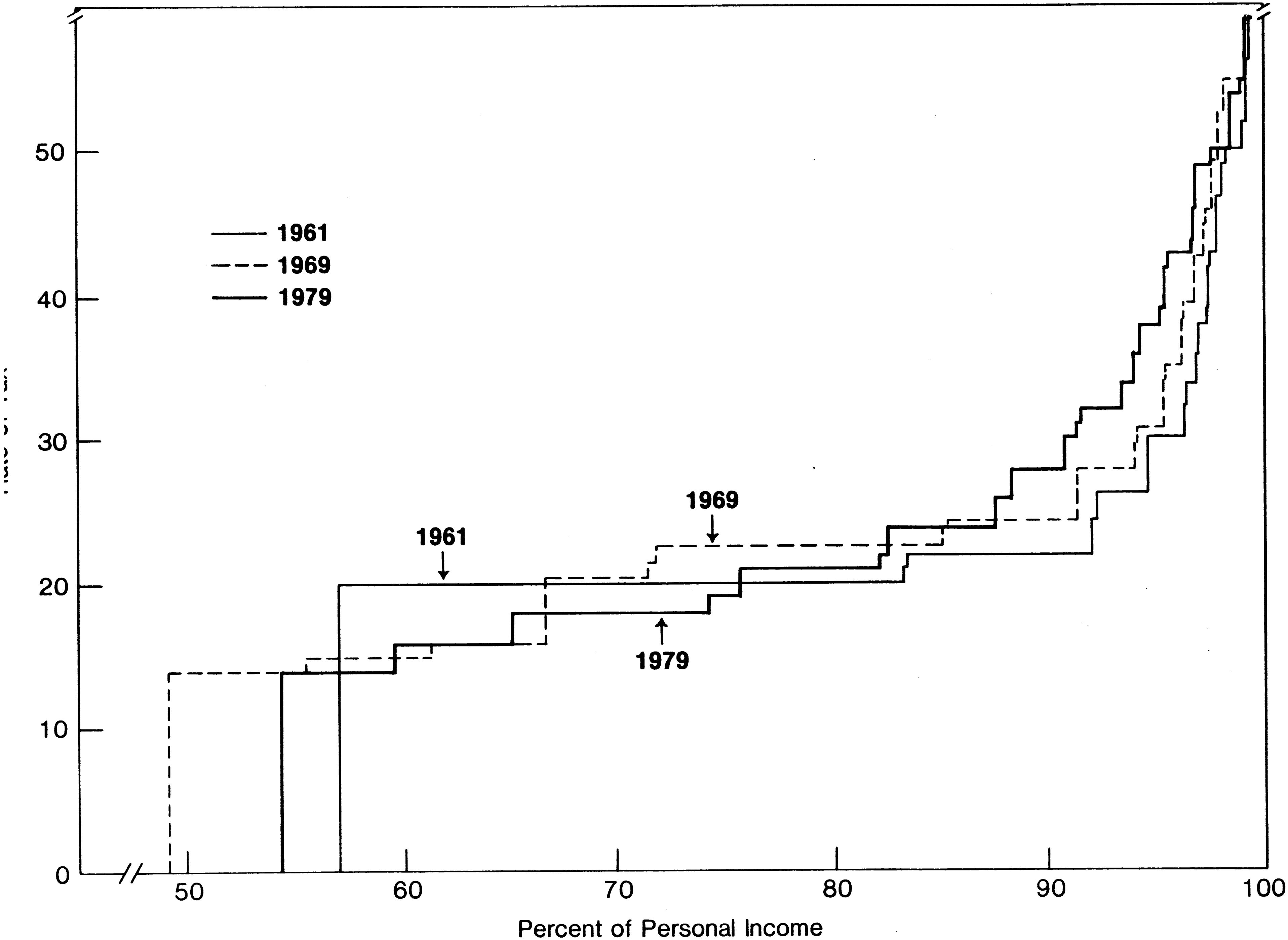


A slightly different perspective is obtained from Figure 5, which shows the percentage of total personal income (rather than the percentage of returns) taxed at or below various rates of tax. Taxpayers pay tax on their income not only in their highest marginal bracket, but in each lower bracket as well. Because many of the changes in the distribution of personal income by rate of tax resemble changes in the distribution of returns by marginal rate of tax, there is a counter-clockwise rotation over time in the curves in both Figures 4 and 5.

Figure 5 provides a quite useful summary of other sections of this paper as well. First, the tax base (determined by the exclusions, deductions, exemptions, etc. discussed in the previous section) is shown in the figure as the percentage of personal income taxed at a positive rate. Second, the average rate of tax on all personal income is equal to the integral, or area, under each curve. By examining this area, we can understand how marginal rates of tax were able to rise for many individuals between 1969 and 1979 even though the average rate for all persons in 1979 remained below the 1969 high. The revenues gained by taxing some income at higher rates simply did not compensate for the revenues lost by taxing other income at lower rates and the reduction in the tax base over that period.

Figure 5

Cumulative Percent of Personal Income Taxed at or Below each Rate of Tax



V. CONCLUSION

Changes in the economy have combined with the actions of Congress, administrators and individuals to modify constantly the structure of the individual income tax. Despite these many changes, the average rate of tax has ranged between 9.2 and 12.1 percent of personal income since 1951, although it is currently approaching a new high. More significant perhaps than any change in the average rate of taxation has been the shift in the means through which much of income is excepted from taxation and in the rates of tax which apply to the base which remains.

The amount of income excluded from taxation has been increasing steadily since 1947, indirectly raising the average tax rate on adjusted gross income even when the rate on personal income has remained relatively constant. Itemized and standard deductions, along with credits against tax, have also grown at a faster rate than personal income, further reducing the tax base. However, since 1947, these erosions have been more than offset by the decrease, relative to personal income, in the amount of adjusted gross income received by nontaxable individuals and, most importantly, in the amount of exemptions.

Exemptions, standard deductions and the general tax credit determine minimum tax-exempt levels of income. Tax-exempt levels of income for couples with two children have consistently been quite close to official poverty levels; this relationship has been purposive at least since 1964. Since incomes have grown faster than official poverty levels (or prices), this has meant over time that fewer and fewer individuals have been exempted from taxation on the basis of their total adjusted gross income. Additionally, the decreased importance of the personal exemption vis-a-vis the standard deduction, along with increases in the standard deduction, has caused an increase in the tax burdens of families with dependents relative to those without dependents.

The rates of tax applying to various parts of the tax base have also been altered substantially. In the early 1960's, only 10 percent of tax returns faced a positive marginal rate of tax other than 20-22 percent. Since then, the marginal rate of tax has risen for tax returns above the median marginal rate and fallen for taxable returns below the median. In general, over the past two decades the combination of tax increases resulting from higher money incomes and legislated tax reductions has resulted in a more progressive distribution of both personal income and individual tax returns by marginal rate of tax.

APPENDIX

Table A-1

TOTAL FEDERAL, STATE AND LOCAL, TAX RECEIPTS a/
(Amounts in $ Billions)

Year	Personal Income	Federal Individual Income Tax		Social Security and Railroad Retirement Taxes		Federal Corporate Profits Tax		Other Federal Taxes b/		State and Local Taxes c/		Total Tax Receipts		State & Local Income Tax Receipts		Total Individual Income Tax Receipts	
		Amount	Percent of Personal Income	Amount	Percent of Personal Income	Amount	Percent of Personal Income	Amount	Percent of Personal Income	Amount	Percent of Personal Income	Amount	Percent of Personal Income	Amount	Percent of Personal Income	Amount	Percent of Personal Income
1947	190.1	18.8	9.88	2.1	1.11	10.7	5.61	8.9	4.66	12.1	6.35	52.5	27.61	0.5	0.26	19.3	10.14
1948	209.0	18.1	8.64	2.2	1.07	11.8	5.62	9.0	4.30	13.7	6.56	54.8	26.19	0.6	0.27	18.6	8.91
1949	206.4	15.4	7.44	2.2	1.06	9.6	4.65	8.9	4.30	15.0	7.26	51.0	24.71	0.7	0.35	16.1	7.79
1950	227.2	17.4	7.67	3.2	1.40	17.2	7.55	9.7	4.25	16.4	7.23	63.8	28.09	0.8	0.34	18.2	8.01
1951	254.9	25.4	9.95	3.9	1.54	21.7	8.50	10.3	4.02	18.1	7.09	79.3	31.10	0.9	0.35	26.3	10.30
1952	271.8	30.1	11.09	4.4	1.62	18.6	6.83	11.3	4.16	19.6	7.21	84.0	30.91	1.0	0.37	31.1	11.46
1953	287.7	31.3	10.87	4.6	1.60	19.5	6.77	12.0	4.17	21.1	7.33	88.4	30.74	1.0	0.36	32.3	11.23
1954	289.6	28.0	9.68	5.7	1.98	16.9	5.82	10.8	3.73	22.2	7.65	83.5	28.85	1.1	0.39	29.2	10.07
1955	310.3	30.4	9.80	6.6	2.12	21.1	6.79	11.8	3.80	24.3	7.84	94.2	30.35	1.3	0.43	31.8	10.24
1956	332.6	33.8	10.18	7.2	2.16	20.9	6.30	12.7	3.82	27.0	8.11	101.7	30.56	1.6	0.47	35.4	10.65
1957	351.0	35.9	10.24	8.5	2.41	20.4	5.81	13.4	3.83	29.0	8.26	107.3	30.55	1.7	0.49	37.7	10.73
1958	361.1	35.4	9.80	8.4	2.33	18.0	4.97	13.0	3.61	30.5	8.45	105.4	29.18	1.8	0.51	37.2	10.31
1959	384.4	38.5	10.01	10.3	2.67	22.5	5.85	14.2	3.69	33.9	8.82	119.3	31.04	2.2	0.58	40.7	10.59
1960	402.3	41.8	10.40	12.6	3.12	21.4	5.33	15.4	3.83	37.1	9.21	128.3	31.90	2.5	0.63	44.4	11.03
1961	417.8	42.7	10.22	12.8	3.06	21.5	5.14	15.8	3.79	39.8	9.53	132.6	31.74	2.8	0.67	45.5	10.89
1962	443.6	46.5	10.49	13.9	3.13	22.5	5.07	17.4	3.92	43.0	9.69	143.3	32.29	3.2	0.72	49.7	11.21
1963	466.2	49.2	10.55	16.4	3.51	24.6	5.27	18.0	3.87	46.0	9.86	154.2	33.07	3.4	0.74	52.6	11.29
1964	499.2	46.0	9.21	17.3	3.47	26.1	5.24	18.9	3.78	50.0	10.01	158.3	31.71	4.0	0.80	50.0	10.02
1965	540.7	51.1	9.45	18.3	3.39	28.9	5.35	19.1	3.53	54.1	10.01	171.5	31.72	4.4	0.82	55.5	10.26
1966	588.2	58.6	9.96	25.9	4.41	31.4	5.34	18.4	3.13	59.1	10.05	193.4	32.89	5.4	0.92	64.0	10.89
1967	630.0	64.4	10.21	29.4	4.67	30.0	4.77	19.1	3.04	64.5	10.23	207.4	32.92	6.3	1.00	70.6	11.21
1968	690.6	76.5	11.08	32.9	4.77	36.1	5.22	21.0	3.04	73.9	10.70	240.3	34.80	8.1	1.17	84.6	12.24
1969	754.7	91.5	12.12	38.5	5.10	36.1	4.78	22.4	2.97	83.0	11.00	271.4	35.97	10.0	1.32	101.5	13.45
1970	811.1	88.8	10.95	39.9	4.92	30.6	3.77	23.0	2.83	91.8	11.32	274.2	33.80	11.1	1.37	100.0	12.32
1971	868.4	85.7	9.86	44.1	5.08	33.5	3.85	24.8	2.86	102.3	11.77	290.3	33.43	12.7	1.46	98.3	11.32
1972	951.4	102.7	10.80	49.9	5.24	36.6	3.85	25.5	2.68	116.3	12.22	331.0	34.79	17.5	1.84	120.2	12.63
1973	1,065.2	109.5	10.28	64.7	6.08	43.3	4.06	26.9	2.52	127.0	11.92	371.4	34.87	19.1	1.80	128.6	12.07
1974	1,168.6	126.4	10.81	73.8	6.31	45.1	3.86	26.7	2.29	136.8	11.70	408.7	34.98	20.6	1.77	147.0	12.58
1975	1,265.0	120.8	9.55	77.1	6.09	43.6	3.44	28.9	2.29	148.2	11.72	418.6	33.09	22.8	1.80	143.6	11.36
1976	1,391.2	141.5	10.17	85.4	6.13	54.6	3.92	29.4	2.11	166.6	11.98	477.4	34.32	26.8	1.92	168.3	12.10
1977	1,538.0	162.7	10.58	94.3	6.13	61.6	4.00	33.1	2.16	185.3	12.05	537.0	34.92	30.9	2.01	193.6	12.59
1978	1,721.8	189.4	11.00	109.2	6.34	71.2	4.14	34.6	2.01	199.2	11.57	603.7	35.06	35.5	2.06	225.0	13.07
1979d/	1,943.8	225.7	11.61	128.5	6.61	74.6	3.84	35.8	1.84	212.2	10.92	676.8	34.82	38.8	1.99	264.5	13.61

Source and footnotes are at the end of the Appendix.

Table A-2

PERSONAL INCOME EXCLUDED FROM ADJUSTED GROSS INCOME A/
(Amounts in $ Billions)

Year	Transfers						Net Nontaxable Labor-Related Income										Total	
	Net Nontaxable Soc.Sec., Railroad Retirement and Supplemental Med. Insurance				Other Nontaxable Transfers d/		Pension & Profit Sharing e/		Health Insurance f/		Other Labor Compen- sation g/		Other Statutory Exclusions h/		Other Differences (Net) i/			
	Retirement & Disability b/		Health c/															
	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.
1947	- .4	-.21	-	-	10.8	5.69	na	na	na	na	na	na	3.3	1.72	na	na	17.4	9.13
1948	- .3	-.15	-	-	10.5	5.02	1.0	.49	.4	.21	1.0	.47	3.3	1.60	6.4	3.06	22.4	10.69
1949	- .1	-.07	-	-	11.2	5.41	1.1	.52	.6	.27	1.0	.49	2.7	1.33	6.0	2.92	22.4	10.86
1950	- .3	-.14	-	-	13.5	5.95	1.5	.67	.7	.33	1.1	.47	1.6	.70	6.3	2.79	24.5	10.77
1951	.2	.09	-	-	9.9	3.89	2.1	.80	1.0	.39	1.2	.49	2.8	1.10	8.5	3.33	25.7	10.09
1952	.3	.12	-	-	10.0	3.67	2.3	.86	1.1	.41	1.4	.51	3.7	1.35	11.1	4.07	29.9	10.99
1953	1.0	.34	-	-	10.0	3.48	2.6	.91	1.3	.46	1.5	.54	3.7	1.26	12.2	4.24	31.0	10.78
1954	1.2	.41	-	-	11.3	3.91	2.7	.93	1.5	.50	1.6	.55	4.0	1.36	12.5	4.33	34.7	11.99
1955	2.1	.66	-	-	11.2	3.61	3.1	1.00	1.7	.55	1.8	.57	3.9	1.26	11.6	3.74	35.3	11.38
1956	2.4	.74	-	-	11.5	3.45	3.4	1.03	2.1	.62	2.0	.61	4.2	1.27	11.4	3.44	37.1	11.16
1957	3.5	1.00	-	-	12.5	3.57	3.8	1.09	2.4	.70	2.2	.64	4.4	1.26	14.0	3.99	43.0	12.24
1958	4.7	1.30	-	-	15.5	4.28	3.8	1.05	2.7	.75	2.3	.65	4.6	1.26	14.8	4.09	48.3	13.39
1959	5.6	1.45	-	-	14.5	3.78	4.4	1.15	3.0	.79	2.5	.66	4.8	1.26	13.3	3.47	48.3	12.56
1960	5.5	1.35	-	-	15.2	3.78	4.5	1.13	3.4	.84	2.7	.68	5.2	1.30	17.7	4.40	54.2	13.48
1961	6.8	1.63	-	-	17.4	4.15	4.6	1.09	3.7	.90	2.8	.68	5.3	1.26	16.6	3.96	57.2	13.68
1962	8.0	1.80	-	-	16.3	3.68	4.9	1.10	4.2	.94	3.1	.70	6.2	1.40	20.2	4.55	62.9	14.18
1963	7.7	1.65	-	-	17.1	3.67	5.2	1.11	4.6	.98	3.3	.72	6.6	1.41	21.0	4.50	65.4	14.03
1964	8.0	1.59	-	-	17.5	3.51	5.9	1.18	5.2	1.04	3.6	.73	7.2	1.44	17.9	3.58	65.2	13.06
1965	9.5	1.76	-	-	18.1	3.35	6.8	1.26	5.9	1.09	3.9	.73	8.0	1.49	21.0	3.89	73.4	13.57
1966	8.5	1.45	- .3	- .06	19.1	3.24	7.5	1.27	6.4	1.09	4.4	.75	9.5	1.61	20.3	3.45	75.3	12.80
1967	8.4	1.33	2.2	.34	21.6	3.43	8.0	1.27	6.9	1.09	4.9	.78	10.7	1.70	21.2	3.36	83.8	13.31
1968	10.9	1.58	2.7	.39	23.4	3.39	9.3	1.34	8.4	1.22	5.6	.82	12.3	1.79	18.0	2.61	90.7	13.13
1969	10.1	1.33	3.4	.45	26.7	3.54	9.9	1.32	9.9	1.32	6.2	.82	13.3	1.76	22.5	2.98	102.0	13.51
1970	14.6	1.80	3.6	.45	33.4	4.12	10.6	1.31	12.1	1.49	6.8	.84	14.6	1.80	29.3	3.62	125.1	15.42
1971	18.0	2.08	4.1	.48	40.2	4.63	11.7	1.35	13.7	1.57	7.3	.84	15.7	1.81	27.3	3.15	138.1	15.90
1972	19.8	2.09	4.5	.47	43.9	4.61	13.4	1.41	16.2	1.70	8.2	.87	16.5	1.74	24.0	2.52	146.6	15.41
1973	25.0	2.34	2.9	.27	46.0	4.32	15.8	1.49	18.0	1.69	9.1	.85	17.4	1.64	29.9	2.81	164.2	15.41
1974	27.7	2.37	5.4	.46	55.3	4.73	18.6	1.60	20.7	1.77	10.1	.86	20.6	1.76	31.4	2.69	189.7	16.24
1975	34.9	2.76	8.0	.63	77.4	6.12	21.4	1.70	24.0	1.90	11.3	.89	23.1	1.83	45.3	3.58	245.5	19.41
1976	40.3	2.89	10.1	.72	78.8	5.66	24.4	1.76	28.8	2.07	13.0	.94	25.0	1.80	38.8	2.79	259.2	18.63
1977	45.3	2.94	12.6	.82	77.6	5.04	28.5	1.85	33.7	2.19	15.4	1.00	28.2	1.83	47.4	3.08	288.6	18.76
1978	47.7	2.77	13.8	.80	78.8	4.58	33.3	1.93	37.9	2.20	18.1	1.05	31.3	1.82	56.3	3.27	317.2	18.42
1979 j/	51.2	2.63	16.0	.83	85.5	4.40	41.1	2.11	41.6	2.14	20.5	1.06	na	na	na	na	na	na

Source and footnotes are at the end of the Appendix.

Table A-3

DEDUCTIONS, EXEMPTIONS, CREDITS AND OTHER NONTAXABLE ADJUSTED GROSS INCOME A/
(Amounts in $ Billions)

Year	Total Adjusted Gross Income (AGI)	AGI of Nontaxable Individuals, Nonreported AGI & Reconciliation b/		Standard Deductions or Zero Bracket Amount for Non-Itemizers on Taxable Returns c/		Itemized Deductions on Taxable Returns		Exemptions on Taxable Returns		Total Exemptions & Deductions		Taxable Income on Taxable Returns (Excluding Zero Bracket Amount)		Income Offset by Credits on Taxable Returns d/		Income Taxed at A Positive Rate	
	Amount	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.	Amt.	Pct. of Pers. Inc.
1947	172.7	37.4	19.68	8.5	4.47	7.1	3.74	44.3	23.31	59.9	31.51	75.4	39.67	n/a	n/a	n/a	n/a
1948	186.6	44.6	21.34	9.5	4.55	6.9	3.30	56.9	24.35	67.3	32.20	74.8	35.79	n/a	n/a	n/a	n/a
1949	184.0	45.4	22.00	9.1	4.41	7.7	3.73	50.1	24.28	66.9	32.42	71.7	34.74	n/a	n/a	n/a	n/a
1950	202.7	44.2	19.46	10.1	4.45	8.9	3.92	55.2	24.30	74.2	32.66	84.3	37.11	n/a	n/a	n/a	n/a
1951	229.2	46.0	18.04	11.7	4.59	10.9	4.28	61.4	24.08	84.0	32.95	99.2	38.91	n/a	n/a	n/a	n/a
1952	241.9	45.3	16.67	12.2	4.49	12.7	4.67	64.5	23.73	89.4	32.90	107.2	39.44	n/a	n/a	n/a	n/a
1953	256.7	46.2	16.06	12.8	4.45	14.5	5.04	68.9	23.95	96.2	33.44	114.3	39.73	n/a	n/a	n/a	n/a
1954	254.9	45.2	15.61	11.6	4.01	15.9	5.49	67.0	23.14	94.5	32.64	115.2	39.79	0.9	0.31	114.3	39.47
1955	275.0	45.4	14.63	12.0	3.87	18.5	5.96	71.2	22.94	101.7	32.77	127.9	41.21	1.6	0.52	126.3	40.70
1956	295.5	45.9	13.80	12.6	3.79	21.0	6.31	74.6	22.43	108.2	32.53	141.4	42.52	1.8	0.53	139.6	41.98
1957	308.1	45.8	13.05	12.3	3.50	23.9	6.81	76.8	21.88	113.0	32.19	149.2	42.51	1.8	0.52	147.4	41.99
1958	312.8	50.6	14.01	11.7	3.24	25.5	7.06	75.8	20.99	113.0	31.29	149.2	41.31	1.8	0.50	147.4	40.81
1959	336.2	48.5	12.62	12.1	3.15	29.6	7.70	79.7	20.73	121.4	31.58	166.4	43.28	1.9	0.51	164.5	42.79
1960	348.1	50.9	12.65	11.7	2.91	32.8	8.15	81.2	20.18	125.7	31.24	171.5	42.63	1.9	0.48	169.6	42.15
1961	360.6	49.4	11.82	11.6	2.78	35.6	8.52	82.5	19.75	129.7	31.04	181.6	43.46	2.1	0.51	179.5	42.96
1962	380.7	50.1	11.29	11.8	2.66	38.7	8.72	85.1	19.18	135.6	30.57	195.0	43.96	3.3	0.75	191.7	43.21
1963	400.8	50.4	10.81	11.9	2.55	42.6	9.14	87.4	18.75	141.9	30.44	208.5	44.72	3.8	0.82	204.7	43.91
1964	434.0	58.0	11.62	14.8	2.96	43.6	8.73	88.3	17.69	146.7	29.39	229.3	45.93	3.7	0.73	225.6	45.19
1965	467.3	58.0	10.73	15.7	2.90	47.4	8.77	91.9	17.00	155.0	28.67	254.3	47.04	2.8	0.53	251.5	46.52
1966	512.9	62.8	10.68	17.1	2.91	51.2	8.71	96.2	16.36	164.5	27.97	285.7	48.57	3.2	0.54	282.5	48.03
1967	546.2	58.7	9.32	17.6	2.79	56.5	8.97	99.1	15.73	173.2	27.49	314.3	49.89	3.4	0.54	310.9	49.35
1968	599.9	61.6	8.92	17.9	2.59	65.8	9.53	102.6	14.86	186.3	26.98	352.0	50.97	3.7	0.53	348.3	50.43
1969	652.7	64.3	8.53	17.7	2.35	76.1	10.08	106.3	14.09	200.1	26.51	388.2	51.44	3.6	0.48	384.6	50.96
1970	686.0	75.8	9.35	18.4	2.27	84.1	10.37	107.0	13.19	209.4	25.82	400.9	49.43	1.8	0.23	399.1	49.21
1971	730.3	79.1	9.11	34.9	4.02	87.6	10.09	115.6	13.31	237.8	27.38	413.4	47.60	3.5	0.40	409.9	47.20
1972	804.8	87.4	9.19	50.8	5.34	92.0	9.67	128.2	13.48	270.8	28.46	446.7	46.95	5.2	0.55	441.5	46.41
1973	901.0	101.3	9.51	54.8	5.14	102.1	9.59	132.4	12.43	289.1	27.14	510.6	47.94	7.3	0.68	503.3	47.25
1974	978.9	98.5	8.43	57.8	4.95	113.6	9.72	136.7	11.70	308.0	26.36	572.4	48.98	7.7	0.66	564.7	48.32
1975	1019.4	121.1	9.57	70.0	5.53	114.4	9.04	123.8	9.79	308.0	24.35	590.4	46.67	41.3	3.27	549.1	43.41
1976	1132.0	127.5	9.16	80.9	5.82	126.7	9.11	128.0	9.20	335.0	24.08	669.4	48.12	67.7	4.87	601.7	43.25
1977	1249.4	151.7	9.86	112.3	7.30	132.1	8.59	126.0	8.19	370.4	24.08	727.9	47.33	72.2	4.69	655.7	42.63
1978	1404.6	162.2	9.42	115.4	6.70	156.2	9.07	132.3	7.68	403.9	23.46	838.5	48.70	88.8	5.16	749.7	43.54
1979 e/	n/a	n/a	n/a	126.8	6.52	175.0	9.00	180.1	9.27	481.9	24.79	918.2	47.24	29.4	1.51	888.8	45.74

Sources and footnotes are at the end of the Appendix.

Table A-4

COMPARISONS WITH TAX-EXEMPT LEVELS OF INCOME
(Amounts in Dollars)

Year	Tax-Exempt Levels of Income a/: Single Person	Tax-Exempt Levels of Income a/: Couple Without Depen'ts	Tax-Exempt Levels of Income a/: Couple With Two Depen'ts	Single: Nonfarm Average Poverty Threshold (or Price Index) b/: Amount	Single: Nonfarm Average Poverty Threshold: Ratio to Tax-Exempt Level	Single: Maximum Money Income of Lowest Quintile of Income Distribution c/: Amount	Single: Maximum Money Income: Ratio to Tax-Exempt Level	Families: Nonfarm 4 Person Family Average b/ Poverty Threshold (or Price Index): Amount	Families: Nonfarm 4 Person: Ratio to Tax-Exempt Level	Families: Maximum Money Income of Lowest Quintile of Income Distribution: Amount	Families: Maximum Money Income: Ratio to Tax-Exempt Level	Annual Minimum Wage d/: Amount	Per-Capita Personal Income e/: Amount
1947	556	1111	2222	1135	2.04	314	0.57	2278	1.03	1584	0.71	835	1319
1948	667	1333	2667	1223	1.84	363	0.54	2455	0.92	1655	0.62	835	1425
1949	667	1333	2667	1211	1.82	367	0.55	2432	0.91	1543	0.58	835	1383
1950	667	1333	2667	1223	1.84	360	0.54	2455	0.92	1661	0.62	1566	1498
1951	667	1333	2667	1320	1.98	390	0.58	2649	0.99	1953	0.73	1566	1652
1952	667	1333	2667	1359	2.04	499	0.75	2728	1.02	2053	0.77	1566	1732
1953	667	1333	2667	1359	2.04	475	0.71	2728	1.02	2139	0.80	1566	1803
1954	667	1333	2667	1366	2.05	461	0.69	2741	1.03	2012	0.75	1566	1783
1955	667	1333	2667	1361	2.04	496	0.74	2731	1.02	2221	0.83	1566	1878
1956	667	1333	2667	1381	2.07	551	0.83	2772	1.04	2438	0.91	2088	1977
1957	667	1333	2667	1430	2.15	557	0.84	2871	1.08	2488	0.93	2088	2050
1958	667	1333	2667	1469	2.20	559	0.84	2949	1.11	2558	0.96	2088	2074
1959	667	1333	2667	1481	2.22	600	0.90	2973	1.11	2677	1.00	2088	2161
1960	667	1333	2667	1504	2.26	650	0.97	3022	1.13	2784	1.04	2088	2226
1961	667	1333	2667	1519	2.28	695	1.04	3054	1.15	2800	1.05	2401	2274
1962	667	1333	2667	1537	2.30	775	1.16	3089	1.16	3000	1.12	2401	2378
1963	667	1333	2667	1555	2.33	792	1.19	3128	1.17	3096	1.16	2610	2463
1964	900	1600	3000	1575	1.75	839	0.93	3169	1.06	3250	1.08	2610	2601
1965	900	1600	3000	1603	1.78	900	1.00	3223	1.07	3500	1.17	2610	2782
1966	900	1600	3000	1649	1.83	998	1.11	3317	1.11	3935	1.31	2610	2992
1967	900	1600	3000	1697	1.89	1000	1.11	3410	1.14	4097	1.37	2923	3170
1968	900	1600	3000	1767	1.96	1180	1.31	3553	1.18	4544	1.51	3341	3440
1969	900	1600	3000	1862	2.07	1235	1.37	3743	1.25	5000	1.67	3341	3772
1970	1725	2350	3600	1972	1.14	1368	0.79	3968	1.10	5100	1.42	3341	3958
1971	1725	2400	3750	2058	1.19	1461	0.85	4137	1.10	5211	1.39	3341	4194
1972	2050	2800	4300	2124	1.04	1596	0.78	4275	0.99	5612	1.31	3341	4555
1973	2050	2800	4300	2257	1.10	1872	0.91	4540	1.06	6081	1.41	3341	5062
1974	2050	2800	4300	2505	1.22	2175	1.06	5038	1.17	6628	1.54	4176	5514
1975	2564	4829	5757	2734	1.07	2320	0.90	5500	0.96	6914	1.20	4385	5923
1976	2700	4100	6100	2891	1.07	2464	0.91	5815	0.95	7441	1.22	4802	6465
1977	3200	5200	7200	3078	0.96	2800	0.88	6191	0.86	7903	1.10	4802	7090
1978	3200	5200	7200	3311	1.03	3040	0.95	6662	0.93	8720	1.21	5533	7871
1979f/	3300	5400	7400	3693	1.12	3381	1.02	7414	1.00	9697	1.31	6055	8810
Percentage Growth 1947-79													
Total...	494%	386%	233%	225%	---	977%	---	225%	---	512%	---	625%	568%
Annual Rate...	5.72%	5.07%	3.83%	3.76%	---	7.71%	---	3.76%	---	5.83%	---	6.39%	6.11%

Sources and footnotes are at the end of the Appendix.

Table A-5

RETURNS AND PERSONAL INCOME BY MARGINAL RATE OF TAX

	Returns Taxed At Or Below Marginal Rate (as a percent of all returns)					Personal Income Taxed At Or Below Marginal Rate (as a percent of total personal income)				
Marginal Tax Rates	1961	1963	1969 b/	1974	1979	1961	1963	1969 b/	1974	1979
0 c/	20.80	18.84	15.32	18.76	21.27	57.04	56.06	49.15	52.05	54.26
14	20.80	18.84	23.44	24.13	29.19	57.04	56.06	55.56	56.39	59.77
15	20.80	18.84	30.45	28.40	29.19	57.04	56.06	61.35	60.37	59.77
16	20.80	18.84	37.81	33.45	35.79	57.04	56.06	66.88	64.43	65.05
18	20.80	18.84	37.81	39.24	48.64	57.04	56.06	66.88	68.40	74.23
20	67.06	62.81	37.81	59.30	52.59	83.21	81.66	66.88	80.25	75.72
21	67.91	63.64	44.70	63.36	63.48	83.48	81.94	71.63	81.59	82.22
22	90.34	87.67	45.75	75.96	64.34	92.16	91.57	71.97	87.67	82.53
23	90.34	87.67	71.94	76.31	64.34	92.16	91.57	85.16	87.75	82.53
24	90.68	88.07	72.58	79.45	75.18	92.26	91.68	85.34	88.57	87.47
25	90.68	88.07	87.89	88.78	75.18	92.26	91.68	91.47	92.37	87.47
26	96.64	95.62	87.89	88.78	77.80	94.99	94.89	91.47	92.37	88.20
28	96.64	95.62	94.36	93.68	83.76	94.99	94.89	94.16	94.46	90.91
30	98.29	97.76	94.42	94.27	85.88	96.24	96.27	94.19	94.64	91.52
32	98.30	97.78	96.89	96.43	90.69	96.25	96.29	95.53	95.79	93.56
34	98.94	98.59	96.89	96.63	92.48	96.99	97.08	95.53	95.87	94.06
36	98.95	98.61	97.99	97.69	92.59	97.00	97.09	93.96	96.59	94.09
38	99.30	99.02	97.99	97.76	95.30	97.51	97.62	96.36	96.64	95.27
41	99.30	99.03	98.61	98.38	95.57	97.52	97.63	96.93	97.17	95.48
44	99.54	99.31	98.95	98.72	97.85	97.90	98.02	97.34	97.52	96.80
47	99.69	99.49	99.18	99.02	97.88	98.17	98.30	97.66	97.86	96.88
50	99.79	99.62	99.36	99.48	99.08	99.04	99.02	97.92	98.95	98.52
53	99.85	99.71	99.49	99.66	99.08	99.19	99.18	98.12	99.16	98.52
56	99.89	99.77	99.68	99.77	99.69	99.31	99.30	99.12	99.30	99.10
60	99.93	99.85	99.88	99.87	99.81	99.47	99.47	99.53	99.47	99.27
64	99.96	99.91	99.92	99.94	99.93	99.62	99.63	99.63	99.62	94.49
68	99.98	99.95	99.94	99.97	99.97	99.71	99.72	99.70	99.71	99.58
72	99.99	99.97	99.98	100.00	100.00	99.80	99.81	99.82	100.00	100.00
76	99.99	99.98	99.99	100.00	100.00	99.85	99.85	99.89	100.00	100.00
80	100.00	99.99	100.00	100.00	100.00	99.88	99.88	100.00	100.00	100.00
91	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Sources and footnotes are at the end of the Appendix.

Footnotes to Table A-1

a/ Sources: U.S. Department of Commerce, Bureau of Economic Analysis. Benchmark revisions for 1980 have been incorporated. See Survey of Current Business, December, 1980.

b/ Includes Federal estate taxes, gift taxes, excise taxes and custom duties, plus employer contributions for Federal unemployment tax, railroad unemployment insurance and Federal workmen's compensation. Excludes Federal nontaxes.

c/ Includes all State and local receipts from taxes and licenses. Excludes nontaxes, receipts from contributions to social insurance and receipts from Federal grants-in-aid.

d/ Preliminary Estimates.

Footnotes to Table A-2

a/ Sources: See footnote a/, Table 1. Unpublished data furnished by Bureau of Economic Analysis. See also Park (1981) and acknowledgements at beginning of this manuscript.

b/ Federal transfers for retirement and disability through social security, (OASDI) and railroad retirement, less personal contributions for same.

c/ Federal transfers of hospital and supplementary medical insurance, less personal contributions to same.

d/ Total government transfers except military pay, taxable government pensions, and transfers for social security and railroad retirement. Includes unemployment compensation, workmen's compensation, food stamps and veterans' benefits.

e/ Employer contributions to pension and profit sharing, plus imputed interest on private pension funds, less taxable private pension income received by individuals.

f/ Employer contributions for private group health insurance.

g/ Employer payments for group life insurance, workmen's compensation (private funds), and supplemental unemployment.

h/ This variable represents other personal income exempted or excluded from the calculation of adjusted gross income: principally, payments to individual retirement accounts, exempt interest income, moving expenses, and certain business expenses treated as personal income by the Bureau of Economic Analysis.

i/ This variable reconciles personal income, less items in previous columns, with adjusted gross income. Includes differences in accounting treatment, plus income received by non-individuals and items of imputed income not in previous columns (such as imputed rental income of homeowners), less items reported in adjusted gross income, but not counted as personal income (such as capital gains).

j/ Preliminary estimates.

Footnotes to Table A-3

a/ Source: See footnote a/, Table 2.

b/ This variable includes adjusted gross income on nontaxable returns and the reconciliation of adjusted gross income as measured by BEA and adjusted gross income as reported to IRS, including income of nonfilers and nonreported income of filers.

c/ After 1977, the standard deduction was converted to a zero bracket amount for all returns. Thus, after 1977, this variable equals zero bracket amount for nonitemizers only, that is, total zero bracket amount, less amount used by itemizers (itemized deductions less excess itemized deductions).

d/ The method for the derivation of income offset by credits on both taxable and non-taxable returns for the years 1961, 1963, 1969, 1974 and 1979 is described in Footnotes to Table 5, footnote c. _/ For this column an average ratio of taxable income offset by credits on taxable returns was calculated for the pre-1964 period as well as the 1964-1979 period from the information gathered for the years in Table 5. The average ratios (pre-1964 = 4.684 and post-1963 = 5.731) were then multiplied by credits on taxable returns to estimate income offset by credits. Year-to-year changes in this column, for the most part, reflect the introduction and elimination of new tax credits (e.g. investment credit in 1962, general tax credit 1976-1978).

e/ Source of 1979 figures is the Treasury Tax Model.

Footnotes to Table A-4

a/ Tax exempt levels are derived from exemptions, standard deductions and general tax credits. Estimates ignore the effect of surcharges, or surtaxes and special rebates, if any.

b/ Official poverty levels each year are recalculated merely by adjusting for changes in the consumer price index (CPI). For years before the adoption of an official poverty level, therefore, levels are calculated by discounting by the change in the CPI. Sources: Characteristics of the Population Below the Poverty Level: 1978, pp. 206-208; for 1979, estimated CPI is obtained from the Monthly Labor Review, June, 1980.

c/ Source: Money Income of Families and Persons in the United States: 1978, p. 65. For 1979, the percentage growth over 1978 is assumed to equal the 1978-1979 percentage growth in *per capita* personal income.

d/ Source: Hourly minimum wage from Minimum Wage Commission. Estimate assumes 2,088 hours of pay annually, including vacations and holidays.

e/ Source: See footnote a/, Table 1.

Footnotes to Table A-5

a/ Most of the information provided on Table 5 can be derived from data found in 1961, 1963, 1969 and 1974 editions of the Statistics of Income: Individual Income Tax Returns (SOI). Beginning in 1961, the SOI provided information on the income subject to tax and the tax, classified by both the highest marginal tax rate and the tax computed at each rate. Estimates for the year 1979 obtained from the Department of Treasury Tax Model.

b/ An adjustment was made to reported data for 1969 to account for a 10 percent surcharge imposed in that year. Because of the phase-in of this credit by AGI, an approximation was made that taxpayers in the 14 to 16 percent brackets faced no additional tax due to the surcharge, taxpayers in the 17 to 20 percent marginal brackets paid an additional 20 percent on marginal dollars of income, and taxpayers with marginal rates above 20 percent faced an additional burden of exactly 10 percent or an increase in rates of tax of 10 percent.

c/ Personal income taxed at a zero rate equals total personal income, less total income taxed at a rate greater than zero.

Unlike SOI data, income taxed at positive rate was adjusted to account approximately for credits against tax. Using the Treasury Tax Model, taxable income offset by credits could be derived fairly rigorously for 1979. Credits essentially offset taxable income in the lowest brackets first. For example, if a taxpayer has $160 of credits, and if the bracket width is $1,000 for the first two positive rates of 14 percent and 15 percent, then the taxpayer's credits offset $1,000 of income at 14 percent and $133.33 (= $20/.15) at the 15 percent rate.

For years before 1979, the credit-offset procedure was necessarily less rigorous because of limitations of the data. However, using the distribution of credits and offset income for 1979, the amount of income offset by credits for these other years could be approximated. The average rate of taxable income offset by credits to total credits equaled 4.684 for years before 1964 and 5.731 for years after 1963.

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